

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A process for purifying polluted air, which process includes
in a conditioning chamber, conditioning the polluted air by moistening it;
allowing the conditioned air to pass from the conditioning chamber into an air
purification chamber; and
in the air purification chamber, passing the polluted air through a fluidized bed of micro-
organism-containing particulate media while simultaneously stirring the fluidized bed so that,
as the polluted air passes through the fluidized bed, organic pollutants therein are decomposed
by the micro-organisms, with purified air containing a lower level of the organic pollutants than
the polluted air that enters the fluidized bed, emerging from the fluidized bed.
2. (Original) A process according to Claim 1, wherein the micro-organism-containing
particulate media comprises inert particles coated with an active medium or biomass.
3. (Original) A process according to Claim 2, wherein the particles have sizes that range from
sub-micron to 5mm.
4. (Previously Presented) A process according to Claim 1, wherein the air that passes through
the bed of particulate media acts also as fluidizing medium for the particulate media, and
wherein the air flow rate is from 0.7m/s to 1.5m/s.
5. (Previously Presented) A process according to Claim 1, which includes maintaining the
fluidized bed at or near anaerobic conditions by controlling the humidity in the fluidized bed.
- 6-17. (Canceled)